

**Listing of Claims:**

This listing of claims will replace all prior versions, and listing, of claims in the application.

1-29. (Canceled)

30. (Currently Amended) A method of operating a gaming system comprising:  
storing simulation rule data and physical object data, the physical object data defining physical objects, the simulation rule data defining rules of a simulated world that affect the physical objects, the simulation rule data and the physical object data being selected to yield a pre-selected desired outcome probability distribution of a plurality of possible simulated outcomes;  
accepting a wager to play a wagering game;  
based on the interaction of the physical object data and the simulation rule data, simulating actions of the physical objects within the simulated world to randomly select a simulated outcome from the plurality of possible simulated outcomes according to the desired ~~a predetermined~~ outcome probability distribution, ~~the desired predetermined outcome probability distribution of the plurality of possible simulated outcomes being defined by the interaction of the physical object data and the simulation rule data;~~  
graphically rendering the actions and the simulated outcome such that the desired outcome probability distribution is readily apparent and discernible to a player of the wagering game; and  
providing an award if the selected simulated outcome represents a winning condition.
31. (Original) The method of claim 30, wherein the simulating and the rendering occur simultaneously such that the actions and the simulated outcome are rendered in real time.
32. (Original) The method of claim 30, wherein the simulating occurs prior to the rendering such that the simulated outcome is selected prior to being rendered.

33. (Original) The method of claim 30, further including randomly modifying the simulation rule data such that pre-defined organizations of the physical objects provide different ones of the simulated outcomes.

34. (Original) The method of claim 30, further including modifying the simulation rule data by bounds to control the possible simulated outcomes.

35. (Original) The method of claim 30, wherein the simulating and the rendering are performed by a 3D processor that receives the simulation rule data and the physical object data from a central processor.

36. (Original) The method of claim 35, wherein the simulation rule data includes common rule data applicable to different types of wagering games such that the 3D processor need not be updated with the common rule data for the different types of wagering games.

37. (Original) The method of claim 30, wherein the simulating and the rendering occur, in part, simultaneously but the simulated outcome is selected prior to being rendered.

38. (Original) The method of claim 30, wherein the simulating commences from a randomly chosen initial condition.

39. (Original) The method of claim 30, wherein the simulating includes influencing the actions with a random variable.

40. (Currently Amended) A gaming system comprising:  
a memory for storing simulation rule data and physical object data, the physical object data defining physical objects, the simulation rule data defining rules of a simulated world that affect the physical objects, the simulation rule data and the physical object data being selected to yield a pre-selected desired outcome probability distribution of a plurality of possible simulated outcomes;  
a wager input device for receiving a wager to play a wagering game;

a display; and

a controller operative to

based on the interaction of the physical object data and the simulation rule data,  
simulate actions of the physical objects within the simulated world to  
randomly select a simulated outcome from a plurality of possible  
simulated outcomes according to the desired a predetermined outcome  
probability distribution, the predetermined outcome probability  
distribution of the plurality of possible simulated outcomes being defined  
by the interaction of the physical object data and the simulation rule data;  
graphically render the actions and the simulated outcome on the display such that  
the desired outcome probability distribution is readily apparent and  
discernible to a player of the wagering game; and  
provide an award if the selected simulated outcome represents a winning  
condition.

41. (Original) The system of claim 40, wherein the controller is operative to simulate and render simultaneously such that the actions and the simulated outcome are rendered on the display in real time.

42. (Original) The system of claim 40, wherein the controller is operative to simulate prior to rendering such that the simulated outcome is selected prior to being rendered on the display.

43. (Original) The system of claim 40, wherein the controller is operative to randomly modify the simulation rule data such that pre-defined organizations of the physical objects provide different ones of the simulated outcomes.

44. (Original) The system of claim 40, wherein the controller is operative to modify the simulation rule data by bounds to control the possible simulated outcomes.

45. (Original) The system of claim 40, wherein the controller includes a central processor and a 3D processor, the 3D processor being operative to receive the simulation rule data and the

physical object data from the central processor and then simulate and render the actions and simulated outcome on the display.

46. (Original) The system of claim 45, wherein the simulation rule data includes common rule data applicable to different types of wagering games such that the 3D processor need not be updated with the common rule data for the different types.

47. (Original) The system of claim 40, wherein the controller is operative to simulate and render, in part, simultaneously but select the simulated outcome prior to being rendered.

48. (Original) The system of claim 40, wherein the controller is operative to simulate the actions commencing from a randomly chosen initial condition.

49. (Original) The system of claim 40, wherein the controller is operative to influence the actions with a random variable.

50. (Original) A computer readable storage medium encoded with instructions for directing a gaming system to perform the method of claim 30.